REMARKS

This is in response to the Office Action dated January 2, 2004. Claims 6-7 have been canceled. New claims 12-24 have been added. Thus, claims 1-5 and 8-24 are now pending.

Initially, it is respectfully requested that the Examiner acknowledge and indicate consideration of the IDS filed September 19, 2000 (applicant has not yet received an initialed PTO-1449 corresponding to the same). In particular, it is respectfully requested that the Examiner provide the undersigned with an initialed copy of the PTO-1449 corresponding to the IDS filed September 19, 2000.

Claim 1 stands rejected under 35 U.S.C. Section 102(b) as being allegedly anticipated by Kondo (US 5,726,728). This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires that "liquid crystal molecules in the liquid crystal regions are aligned vertically with respect to a surface of the wall structures, and an alignment direction of the liquid crystal molecules in the liquid crystal regions with respect to side faces of the wall structures in the corners changes continuously." For example, Fig. 2A of the instant application illustrates that vertical alignment film 18 (which aligns the liquid crystal molecules) is located *over top of (or covering)* wall structures 16. Thus, in the off state, liquid crystal molecules are aligned vertically with respect to the upper surface of the wall structures 16 (including relative to the wall structure side faces in the corners) because of the presence of vertical alignment (VA) film 18 covering the wall

structures. Moreover, because the VA film 18 is located *over (or covering)* the wall structures 16, and because the corners are dulled, the alignment direction of the liquid crystal molecules in the dulled corners changes continuously (e.g., see Figs. 4A-4D). This is highly advantageous because, for example, this permits roughness of image display to be reduced or avoided near the surface of the wall structure, especially in corner areas. The cited art fails to disclose or suggest the aforesaid underlined aspect of claim 1.

Kondo teaches directly away from the invention of claim 1, and cannot possibly disclose or suggest the same. In particular, Kondo locates alignment film 30 *under* the wall structures. Examples 23-24 of Kondo make clear that Kondo first forms alignment film 30 and rubs the same, and *thereafter* polymeric walls 8 are formed (see Figs. 31-33 of Kondo). Since the alignment film 30 is located *under* the alleged polymer walls 8 in Kondo, the reference cannot possibly meet the invention of claim 1 which requires that "liquid crystal molecules in the liquid crystal regions are aligned vertically with respect to a surface of the wall structures." In other words, since there is no alignment film on the surface of Kondo's alleged walls, the alleged walls of Kondo (or a coating thereon) cannot possibly regulate LC alignment direction(s). This structure of Kondo is problematic and undesirable, because it may cause significant alignment disturbances to occur near the surface of the alleged walls, especially in corners of liquid crystal regions, thereby causing undesirable image quality.

Moreover, since the alignment film in Kondo is located under the alleged walls, Kondo also cannot possibly disclose that "an alignment direction of the liquid crystal molecules in the liquid crystal regions with respect to side faces of the wall structures in the corners changes continuously." Instead, since Kondo's alignment film is located under the alleged walls, there cannot possibly be any continuous alignment direction change in corners as required by claim 1. Again, Kondo teaches directly away from the invention of claim 1 in this respect.

For each of the two aforesaid reasons, Kondo cannot possibly meet the invention of claim 1. Moreover, it can be seen that Kondo actually teaches directly away from claim 1 in each of these two respects. Accordingly, it is respectfully requested that the rejection of claim 1 be withdrawn.

Claim 9 requires that "liquid crystal molecules in the liquid crystal region are aligned vertically relative to a surface of the wall structure , and an alignment direction of the liquid crystal molecules in the liquid crystal region with respect to side faces of the wall structures in the corners changes continuously." Again, Kondo fails to disclose or suggest these aspects of claim 9.

Claim 12 requires that "a height of the wall structures is about one third or less of a thickness of the liquid crystal layer." Thus, the liquid crystal layer above the wall structure can contribute to the display (e.g., pg. 12, lines 11-14; and pg. 21, lines 15-21). If the wall structure height exceeds this, the high aperture effect is undesirably lowered (e.g., pg. 21, lines 18-21).

In contrast, Kondo discloses that polymeric walls 8 are formed between the opposing substrate, with no gap therebetween. Thus, there cannot possibly be any liquid crystal material over the walls for contributing to display, since the walls in Kondo extend all the way through the liquid crystal material. Kondo is highly undesirably in this regard, since Kondo's aforesaid structure thus undesirably limits the aperture ratio of the display. Thus, Kondo clear fails to disclose or suggest that "a height of the wall structures is about one third or less of a thickness of the liquid crystal layer" as required by claim 12. Moreover, Kondo teaches directly away from this aspect of claim 12 since Kondo requires that its wall structure extend all the way through the liquid crystal layer.

Claim 19 also requires that "a height of the wall structure is about one third or less than a thickness of the liquid crystal layer." As explained above, Kondo fails to disclose or suggest this aspect of claim 19.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

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